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ABSTRACT

10 A process for selecting the best possible route for an alternate communications path in connection-oriented networks takes into account the reserved network resources and the set of links and/or nodes used by a current communications path. Whenever a request for route selection includes the resources reserved by the current communications path, the alternate communications path is computed considering the network resources reserved by the current communications path as available, in addition to the available network resources existing in the topology database.

20 In another embodiment of the invention, the topology database is initially modified such that the network resources reservations used by the current communications path are removed from the topology database. The alternate communications path is then computed. Finally, the topology database is restored to reflect again the network resources reservations used by the current communications path.

25 The method according to the invention improves network utilization since it is based on a realistic network resources allocation and connection management. The longevity connection and the capacity of the network are increased allowing for more connection-oriented services to be deployed in the network.